

# Notice of Allowability

Application No.

10/632,730

Examiner

Andy Huynh

Applicant(s)

FJELSTAD ET AL.

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment dated 12/09/2004.
2. ☒ The allowed claim(s) is/are 1,4-17 and 19-23.
3. ☒ The drawings filed on 31 July 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9/28/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Andy Huynh*  
Patent Examiner

### **DETAILED ACTION**

In the Amendment dated December 09, 2004, claims **2, 3 and 18** are canceled, and claims **1, 4-11, 14 and 17** are amended is acknowledged. Accordingly, claims **1, 4-17 and 19-23** are currently pending in this application.

#### ***Allowable Subject Matter***

The following is an examiner's statement of reason for allowance:

Claims **1, 4-10, 12 and 13** are allowable over the prior art of record because the prior art of record does not teach or render obvious a multilayered circuit component comprises, in combination with all other features, the first trace element and the second trace element each form a pedal shaped support element on the first surface as recited in independent claim **1**.

Claim **11** is allowable over the prior art of record because the prior art of record does not teach or render obvious a multilayered circuit component comprises, in combination with all other features, the first trace element has a radius of curvature that defines a first circle, the second trace element has a radius of curvature that defines a second circle, and wherein the first trace element and the second trace element each have an arc length that is less than 50% of a circumference of the corresponding first or second circle.

Claims **14-16** are allowable over the prior art of record because the prior art of record does not teach or render obvious a multilayered circuit component comprises, in combination with all other features, each aperture is shaped to receive a corresponding male connector element that can extend into the aperture and make electrical contact with the one or more trace elements that are provided in that aperture, so that another layer comprising an array of male

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connectors is matable with the component using the array of apertures of the surface as recited in independent claim 14.

Claim 17 is allowable over the prior art of record because the prior art of record does not teach or render obvious a multilayered circuit component comprises, in combination with all other features, the first partial perimeter of the first opening has a first radius of curvature, the second partial perimeter of the first opening has a second radius of curvature, and another perimeter portion of the opening has a third radius of curvature, wherein at least the third radius of curvature is different than the first radius of curvature and the second radius of curvature.

Claims 19-23 are allowable over the prior art of record because the prior art of record does not teach or render obvious a multilayered circuit component comprises, in combination with all other features, a plurality of trace element clusters, each trace element cluster extending inward from the first surface of the first layer to an other surface of the multi-surfaced circuit component, wherein each trace element cluster includes at least (i) a first trace element for providing a first connection to one or more current bearing components on the other surface that the first trace element extends to, and (ii) a second trace element for providing a second connection to one or more current bearing components on the other surface that the second trace element extends to as recited in independent claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Huynh whose telephone number is (571) 272-1781. The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Andy Huynh

12/24/04

Patent Examiner